



IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) A device manufacturing method comprising the steps of :
  - (a) providing a polished silicon substrate having a background portion and one or more target portions, said background and target portions having Si-H bonds on the surface;
  - (b) irradiating said one or more target portions using a patterned beam of radiation and in the presence of oxygen to provide a layer of silicon oxide on said target portion(s);
  - (c) reacting at least a part of said background portion with a first composition comprising one or more compounds selected from 1-alkenes and 1-alkynes;
  - (d) removing said layer of silicon oxide from said target portion(s);
  - (e) reacting one or more target portions with a further composition comprising one or more compounds selected from 1-alkenes and 1-alkynes, to covalently attach said one or more compounds to said target portion(s).
2. (Original) A method according to claim 1, wherein step (e) comprises irradiating said one or more target portions in the presence of the further composition, using a patterned beam of radiation.
3. (Currently Amended) A method according to claim 1 or 2, which method further comprises repeating step (e) one or more times, each repetition being carried out at one or more different target portions and in the presence of a further composition comprising one or more compounds selected from 1-alkenes and 1-alkynes, each further composition being the same or different.
4. (Original) A device manufacturing method comprising the steps of :
  - (a1) providing a polished silicon substrate having a background portion and one or more target portions, said background and target portions having Si-H bonds on the surface;

(b1) reacting one or more target portions with a further composition comprising one or more compounds selected from 1-alkenes and 1-alkynes, to covalently attach said one or more compounds to said target portion(s); and

(c1) reacting at least a part of said background portion with a first composition comprising one or more compounds selected from 1-alkenes and 1-alkynes.

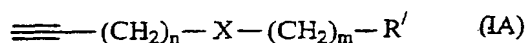
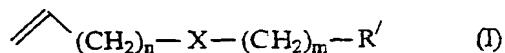
5. (Original) A method according to claim 4, wherein step (b1) comprises irradiating said one or more target portions in the presence of the further composition, using a patterned beam of radiation.

6. (Currently Amended) A method according to claim 4 or 5, which method further comprises repeating step (b1) one or more times, each repetition being carried out at one or more different target portions and in the presence of a further composition comprising one or more compounds selected from 1-alkenes and 1-alkynes, each further composition being the same or different.

7. (Currently Amended) A method according to claim 1 ~~any one of the preceding claims~~, wherein one or more of the target portions has in its surface a part of a transistor structure.

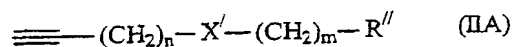
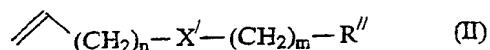
8. (Original) A method according to claim 7, wherein said silicon substrate comprises 10 or more target portions, each having a part of a transistor structure in its surface.

9. (Currently Amended) A method according to claim 1 ~~any one of the preceding claims~~, wherein said first composition comprises one or more compounds of formula (I) or (IA):



wherein n and m independently represent an integer of from 1 to 36; X represents a single bond, -O-, -S-, -C(O)-O-, -O-C(O)- or an unsubstituted C2-C4 alkenylene or alkynylene group containing one or two double and/or triple bonds; and R' represents hydrogen.

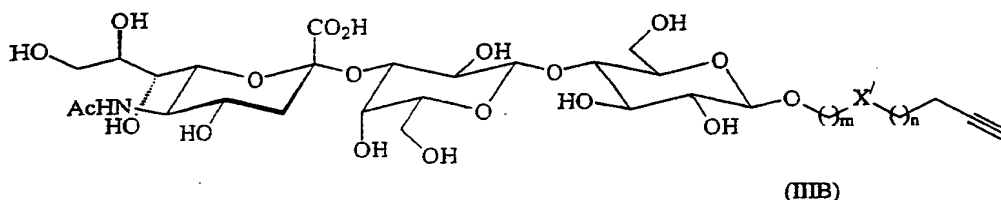
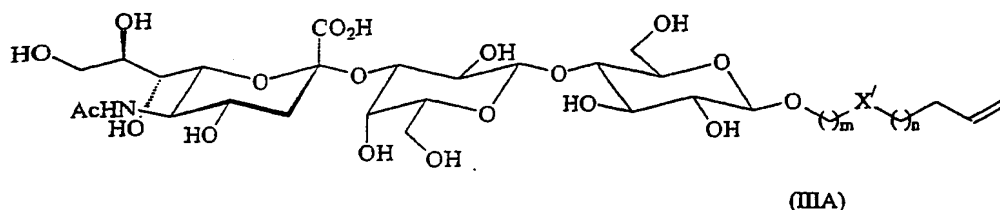
10. (Currently Amended) A method according to claim 1 ~~any one of the preceding claims~~, wherein the further composition comprises one or more compounds of formula (II) or (IIA):



wherein n and m independently represent an integer of from 1 to 36; X' represents a single bond, -O-, -S-, -C(O)-O-, -O-C(O)- or an unsubstituted C2-C4 alkenylene or alkynylene group containing one or two double and/or triple bonds; R'' represents hydrogen or a group selected from halogens, cyanide groups, carboxylic acid derivatives including esters and amides, alkoxy groups, thio groups, amines, including mono- and di-alkylamines, hydroxy groups and receptor derivatives which are capable of interacting with a chemical or biological substance.

11. (Original) A method according to claim 10, wherein R'' represents an oligosaccharide or an oligopeptide which is capable of interacting with a chemical or biological substance.

12. (Original) A method according to claim 11, wherein said further composition comprises a compound of formula (IIIA) or (IIIB):



which is optionally protected on the saccharide units with protecting groups, wherein  $n$ ,  $m$  and  $X'$  are as defined in claim 10.

13. (Currently Amended) A device obtained or obtainable by the method of claim 1 ~~any one of the preceding claims~~.

14. (Original) A device comprising:

- a polished silicon substrate having a background portion and one or more target portions, at least one of said target portions having a part of a transistor structure in its surface;
- an organic monolayer which is directly coupled to at least a part of the surface of the silicon substrate by covalent bonds, said organic monolayer comprising receptor compounds, each of which is capable of interacting with a chemical or biological substance, in area(s) which cover the or each target portion having a part of a transistor structure;

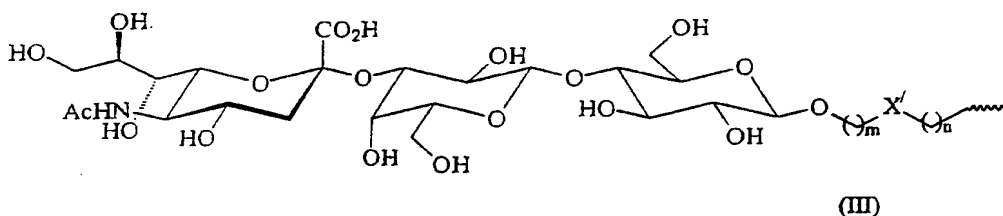
wherein the part of a transistor structure combined with the organic monolayer containing receptor compounds forms a field effect transistor.

15. (Original) A device according to claim 14, wherein said silicon substrate has 2 or more, preferably 10 or more, target portions.

16. (Original) A device according to claim 15, wherein the monolayer comprises receptor compounds of a first type in an area covering a first target portion, and receptor compounds of a different type in an area covering a second target portion.

17. (Currently Amended) A device according to claim 14 ~~any one of claims 14 to 16~~, wherein the monolayer in the area covering at least one target portion comprises one or more oligosaccharide or oligopeptide derivatives.

18. (Original) A device according to claim 17, wherein the monolayer in the area covering at least one target portion comprises an oligosaccharide derivative of formula (III)



wherein n, m and X' are as defined in claim 10.

19. (Currently Amended) Use of a device according to claim 13 ~~any one of claims 13 to 18~~ as a sensor.

20. (Original) A method of coupling an oligosaccharide or oligopeptide derivative to a polished silicon surface, which method comprises reacting a compound of formula (VI) or (VIA):



wherein Oligo represents an oligosaccharide or oligopeptide derivative and n, m and X' are as defined in claim 10, with a silicon substrate having Si-H bonds at its surface, substantially in the absence of oxygen and in the presence of heat or UV or visible radiation.